

ABSTRACT

The invention relates to a turbo-machine comprising a rotor, a stator, and a flow channel for an actuating fluid used to drive the rotor. Said turbo-machine comprises a magnet for producing a pre-determinable magnetic field in the flow channel. The invention also relates to a method for operating a turbo-machine comprising a rotor, a stator, and a flow channel. According to the invention, an ion-containing actuating fluid flows through the flow channel and a defined magnetic field is produced in the flow channel, ions being deviated in the magnetic field.